

REMARKS

As a result of this amendment, claims 1-7, 10-28, and 32-41 are now pending in this application. Of these, claims 1-28 and 32-39 were rejected under 35 USC §112 and claims 1-5, 32-33, and 35-41 were rejected under 35 USC §103.

A detailed response to these rejections follows. However, applicant reserves all applicable rights not expressly exercised in connection with this response, including, for example, the right to swear behind one or more cited references and the right to rebut characterizations of the references and asserted combinations or motives for combination. Applicant makes no admissions regarding the prior art status of any of the cited references.

Response to Statement Alleging Applicant's Omission of Horie

Page 9 of the Action states that the Horie reference is pertinent to Applicant's invention and was cited in various related applications, [but it] was omitted in the present application." This statement is made after over 4 pages of generalized discussion of applicant's duty of candor.

In response, applicant submits respectfully that this statement is incorrect. Applicant cited Horie to Patent Office in an Information Disclosure Statement dated July 8, 1998. For the Examiner's benefit, a copy of that Statement, the postcard acknowledging its receipt, and the initialed 1449 acknowledging its consideration are attached to this paper.

Response to §112 Rejections

Claims 1-28 and 32-39 were rejected under 35 USC §112, second paragraph, as being indefinite. In response, applicant has amended independent claims 1, 4-5, 12, 20, 23, 28, and 32-35 to specify, for example, providing a metal or forming a metal layer. Support for this added language is found, for example, at page 6, lines 14-24 of the original specification. Some dependent claims have been amended to maintain proper antecedence basis with the amended independent claims. Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw these rejections.

Response to §103 Rejections

In the Action, claims 1-5, 7-11, 28, 32, 33, and 35-41 were rejected under 35 USC § 103(a) as being unpatentable over Tsai (U.S. Patent No. 5,235,204) in view of Horie ("Novel High Aspect Ratio Aluminum Plug for Logic/DRAM LSIs..."). Claim 6 was rejected under 35 USC § 103(a) as being unpatentable over Tsai in view of Horie as applied to claims 1-3 and 7-11 above, and further in view of Aboelfotoh et al. (U.S. Patent No. 5,801,444).

In response, applicant submits respectfully that the Action fails to set forth a prima facie case of obviousness because it fails to cite any teaching or suggestion in the art for combining Tsai and Horie. Nothing is cited from Tsai as leading one without hindsight to incorporate the teachings of Horie, and nothing is cited from Hori as leading one without hindsight to combine it with Tsai. And, no other references are cited in support of the combination.

Instead of an objective teaching or suggestion from the art, the Action states only that "Hori teaches the use of polysilicon-aluminum substitute and that it would have been obvious to one of ordinary skill in the art to incorporate the polysilicon-aluminum substitute of Hori into the Tsai semiconductor process because it will result in Applicant's 'cross-diffusing metal and at least a portion of the polysilicon layer to thereby form an emitter contact.'" (Emphasis added.) Respectfully, this cited motivation is the same as saying that applicant's invention is the motivation for the combination. As such, the rejection is based not on the cited art as required by law, but on an excessive degree of hindsight.

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw all the §103 rejections based on Tsai and Horie.

Response to Double Patenting Rejection

Claims 1-28, 32-38, and 40-42 were objected to under 37 CFR 1.75 as being substantial duplicates of claims 1-31 of U.S. Published Application 2002/0014660A1, and asserting "the gate insulator and the diffusion barrier layer prevent dopants to diffuse through the gate oxide and therefore are equivalent to each other."

In response, applicant submits respectfully that the present claims address formation of an emitter contact and the claims in the cited publication address formation of a gate contact.

Moreover, applicant notes the rejection cites nothing to substantiate that one of skill would ordinarily regard a gate oxide as the equivalent of a diffusion barrier layer.

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the double-patenting rejection.

CONCLUSION

In view of the amended claims and remarks above, applicant requests respectfully that the Examiner reconsider and withdraw the rejections. The Examiner is invited to telephone Applicant's attorney at (612) 349-9593 to resolve any issues which might delay allowance or to otherwise facilitate prosecution.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

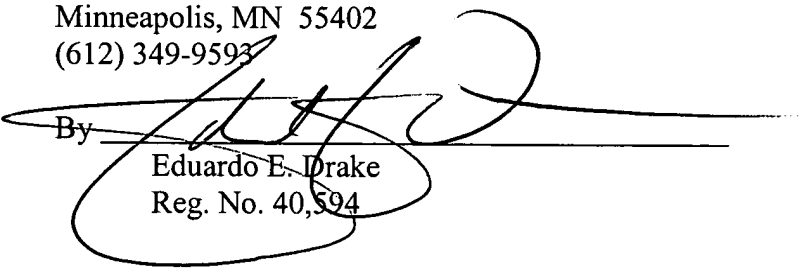
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Date 29 Dec 2003

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 29th day of December, 2003.

Name

Amy Moriarty

Signature

